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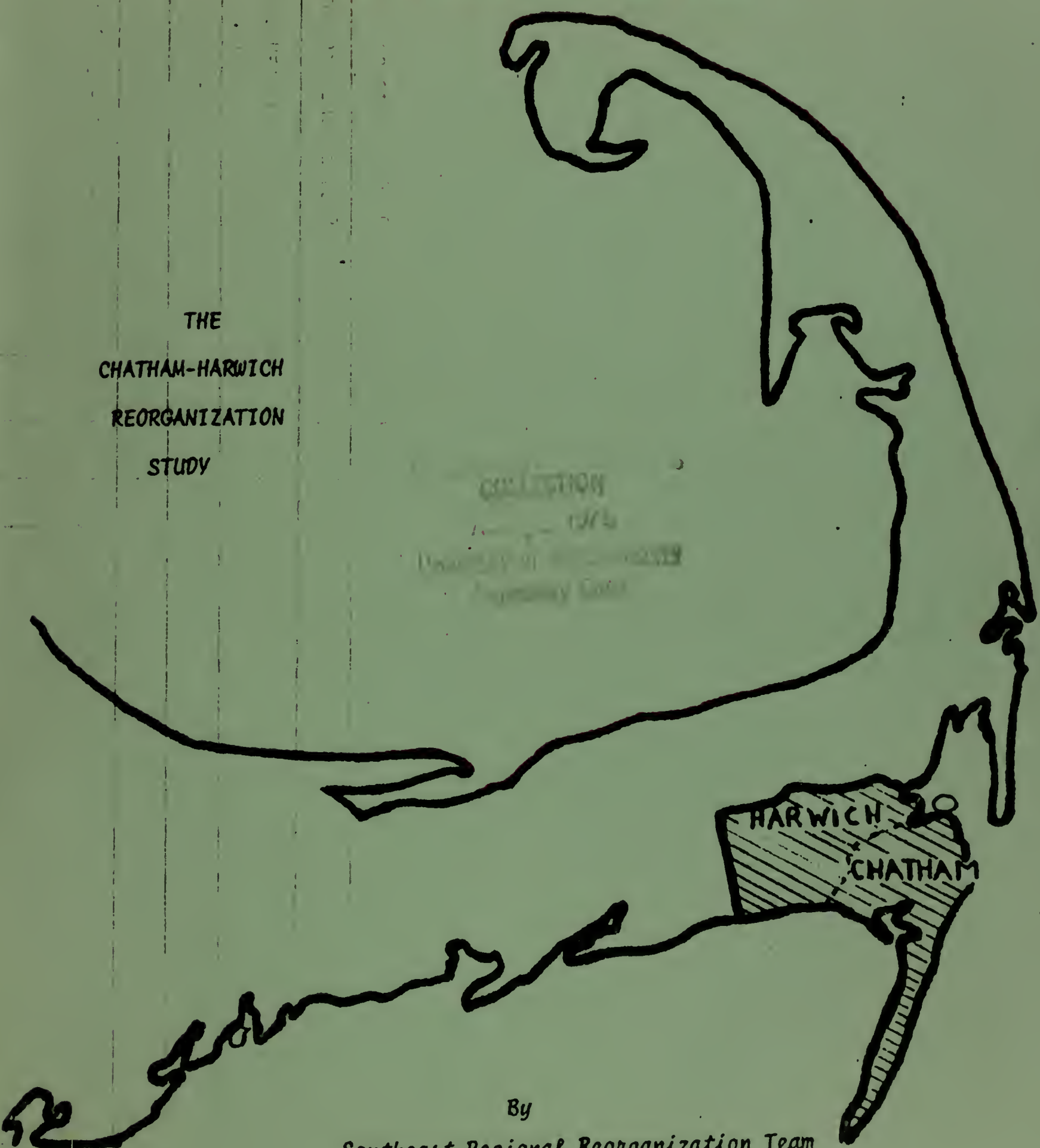


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THE
CHATHAM-HARWICH
REORGANIZATION
STUDY

COLLECTION
1975
UNIVERSITY OF MASSACHUSETTS
AMHERST



By

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M E M O R A N D U M

TO: Chairpersons of the Chatham School Committee, Harwich
School Committee, and Chatham-Harwich Regional Plan-
ning Committee

FROM: E. Curtis Hall, Director, Southeast Regional Center

DATE: November 17, 1978

On behalf of the Southeast Regional Center School District
Reorganization Team I am pleased to present our Chatham-Har-
wich School District Reorganization Study to you.

I want to thank you and the many other fine citizens of both
towns who gave so freely of their time, information and in-
sights. Their thoughts in a real way formed the basis for the
entire report. The Team is grateful to them for their help.

For the Team, we look forward to meeting with you to discuss
our findings, and we welcome any comments that you may wish
to share that will improve our process.

/de

T H E

C H A T H A M - H A R W I C H

R E O R G A N I Z A T I O N

S T U D Y

TABLE OF CONTENTS

I	INTRODUCTION.....	1
II	EXECUTIVE SUMMARY.....	3
III	ENROLLMENT STUDY TEAM SUMMARY.....	9
IV	FACILITIES STUDY TEAM SUMMARY.....	18
V	HIGH SCHOOL STUDY TEAM SUMMARY.....	26
VI	INTERMEDIATE SCHOOL STUDY TEAM SUMMARY....	35
VIII	FOOD SERVICES STUDY TEAM SUMMARY.....	45
IX	OPINION STUDY.....	47
X	FINANCE STUDY TEAM SUMMARY.....	56
XI	SPECIAL EDUCATION STUDY TEAM REPORT.....	61
XII	RECOMMENDATIONS.....	63

LIST OF TABLES

TABLE 1.....	NEW HOUSING PERMITS
TABLE 2.....	CHATHAM ENROLLMENT PROJECTION
TABLE 3.....	HARWICH ENROLLMENT PROJECTION
TABLE 4.....	CHATHAM-HARWICH COURSE ENROLLMENTS
TABLE 5.....	COURSE OFFERING COUNTS
TABLE 6.....	OPERATING COSTS PER PUPIL SCHOOL YEAR 1976-77
TABLE 7.....	SCHOOL EXPENDITURE COMPARISON SCHOOL YEAR 1976-77
TABLE 8.....	REGIONAL AID CALCULATION

LIST OF FIGURES

FIGURE 1.....	CHATHAM-HARWICH POPULATION
FIGURE 2.....	CHATHAM-HARWICH GRADE 9-12 ENROLLMENTS PAST AND FUTURE

CHATHAM-HARWICH REGIONALIZATION STUDY

I. INTRODUCTION

This study of the school systems of Chatham and Harwich is the result of a concern that began two years ago when the newly formed reorganization team in Lakeville was invited to Chatham to speak with a group of parents and other citizens from both towns about reorganization. Chatham was experiencing a declining enrollment, and was looking for alternatives to deal with their problem.

The team in Lakeville undertook the present study at the specific request of the respective school committees and the regional school district planning board. The intention of the team was to offer some recommendations to both towns as to how they might deal more effectively with their existing resources.

From the outset the team established as its goal the presentation of a series of alternatives that the two towns might follow up on for better use of their existing school resources. Mindful of the past concerns about the formation of a regional school district, the team looked for areas of cooperation between the two towns. These areas became readily evident to the staff of the study team. Not surprisingly, in many instances these had been already suggested locally through a "unification schema".

For the Department of Education regional center personnel to undertake such a study is a significant departure from our usual role. There is no doubt that the Department has both the resources and the requisite skills to undertake the study, but in the past, because of the organization structure of the Department, it was not possible to call upon the talents of the various divisions and bureaus readily. Now, within the Southeast Regional Center, the Department of Education has personnel from all divisions and most of the bureaus, and it is capable of organizing such studies. This study is the first such effort.

For the study team, it was a new effort in interrelating and it was the kind of experience that the Southeast Regional Center hopes to provide as a part of its staff development program, but more importantly, it is an effort through which improved service is rendered by the Department to local school districts.

The team wishes to thank the many school officials town officials, parents, citizens and elected officers for their strong support and cooperation in this effort. In particular Superintendents Leonard Fougere and Neal Todd, as well as former Superintendent Paul Mitchum were of enormous assistance to the team, and with their active cooperation the report would not have been possible.

II. EXECUTIVE SUMMARY

II. SUMMARY OF FINDINGS

<u>AREA OF STUDY</u>	<u>CHATHAM</u>	<u>HARWICH</u>	<u>RECOMMENDATIONS/IMPLICATION</u>	
			<u>FOR COOPERATIONS</u>	<u>FOR K-12 REGL SCHOOL DISTRICT</u>
ENROLLMENT FORECAST	Significant decline in school age population to continue.	School age population will experience a small steady decline	School population trends monitored annually.	
HIGH SCHOOL	Very small class sizes most subject areas. Limited number of course offerings in math, science, industrial arts, home economics.	Small class sizes in many subject areas. Limited number of course offerings.	Sharing the unique strengths of each High School for a more cost effective Education Program.	One High School for both towns. The best of each is open to both.
MIDDLE SCHOOL	270		<u>ENROLLMENT, Grades 5-8</u>	
			Curriculum Coordinator	505
	Building Principal		Building Task Person	

MIDDLE
SCHOOL
cont.)

<u>270</u>		<u>PROGRAMS</u>		<u>505</u>
<u>Grade</u>			<u>Grade</u>	
	<u>1. Reading and Mathematics</u>			
5&6 7&8	Grouped Departmentalized		5&6 7&8	Team Taught Semi-departmentalized & team taught
	<u>2. Foreign Language</u>			
7&8	French		7&8 7&8	French 1/2 year Spanish 1/2 year
	<u>3. Social Studies</u>			
5&6 7&8	Heterogeneously grouped Departmentalized		5-8	Team Taught
	<u>4. Science</u>			
5&6 7&8	Heterogeneous Departmentalized		5-8	Team Taught
	<u>5. Occupational Education</u>			
6,7,8	Industrial Arts, Woodshop, Home Economics		7&8	Industrial Arts, Home Economics
	<u>6. Art</u>			
	One full-time teacher			One full-time teacher

7. Music

4,5 Junior Band
6,7,8 Band
Mixed Chorus
Choir
Full-time Instrumental
teacher
Part-time vocal teacher

Intermediate Band & Orchestra
Jr. High Band & Orchestra
Intermediate Chorus
Jr. High Chorus
2 full-time teachers

8. Student Activities

Girls Field Hockey
Basketball, softball
Boys Soccer, Basketball,
Softball
Co-ed. Tennis, Soccer,
basketball, softball.
Ski Club
National Honor Society

Drama Club
Rocketry Club
Intra-mural & Inter-scholastic
Field Hockey, Soccer, Basketball,
Softball.

9. Media

1 Library/Media Teacher

1 Library/Media Teacher

<u>Summary of Findings</u>		<u>Recommendations/Implication</u>	
ELEMENTARY	<u>CHATHAM</u> <u>HARWICH</u> Curriculum Coord. Building Principal Building Task person	FOR COOPERATIONS	FOR K-12 REG'L SCHOOL DISTRICT
		Curriculum coordination in Chatham	Same as those under cooperation.
FACILITIES	H.S. Excellent High School Middle School is needs upgrading marginal Middle school below standard and inadequate. Elementary School is excellent school is excellent.	Grade 5-6 facility in Harwich should be eliminated. Harwich High school in need of improvements.	Elimination of Harwich 5-6 facility and possibly Chatham Intermediate facility by either addition to Harwich high school or Chatham high school
FINANCE	\$1936/PP \$1805/PP Barnstable \$1610 Falmouth \$1616 Dennis/Yarmouth \$1483 Provincetown \$2156		Regional aid annually 10½% of operational budget. 1977 Regional Aid estimate \$400,000

Summary of Findings		Recommendations/Implication	
TRANSPORT	CHATHAM	FOR COOPERATIONS	FOR K-12 REG'L SCHOOL DISTRICT
	5 Buses operational FY'77 Transportation Cost \$95,427 1 contract	14 Buses operational FY'77 Transportation Cost \$165,469 Multiple contracts.	Study the formation of a transportation collaboration. One transportation system and modest increase in state reimbursement \$5/pupil.
SPECIAL EDUCATION	Prototype No. of Children 18 101 3 1 12 4 Placement 502.1 502.2 502.3 502.4 502.5 502.6 No. of Children 101 136 2 10 6 1	Sharing prototypes will reduce costly out-of-district placement. Shared transportation would reduce costs.	Same as those under cooperation.
OCCUPATIONAL EDUCATION	Need for expanded offering in Industrial Arts in each High School. Chatham is in need of a K-12 Career Education Program.	Charing courses in Industrial Arts and Home Economics at the High School level.	
CENTRAL ADMIN. STUDY	1 No. Professionals 3 No. Support Personnel		Need for one Business Manager. Better use of existing personnel through elimination of duplication

<u>Summary of Findings</u>		<u>RECOMMENDATIONS/IMPLICATION</u>	
	<u>CHATHAM</u>	<u>HARWICH</u>	<u>FOR K-12 REG'L SCHOOL DISTRICT</u>
FOOD SERVICE	Storage inadequate. Joint Purchasing potential limited by insufficient storage.	Middle School kitchen dated. Storage inadequate.	Without increased storage no serious potential for cooperation

III. ENROLLMENT STUDY TEAM SUMMARY

General Population Growth and History

Chatham

Chatham's general population continues to grow as is shown on Figure 1. This growth in the town is almost entirely from in-migration of an older non-child bearing population. To illustrate, from 1960-1970, Chatham grew by 1259 residents, but the total difference between births and deaths in the town over the same decade was only 22.

The percentage of each age group among the general population is growing at the older levels. In 1970, the population 65 years of age and over represented nearly 22% of the town population. This is well above the percentage for the Cape as a whole, and it is considered quite low by town officials, who suggest that it is above 25% and growing.

Reflecting both the national and state trend, births in Chatham are declining. In the five year period from 1961 to 1966, the average number of births per year was 54, and in the five year period from 1972 to 1977, there was an average of 43 births annually. Births in Chatham are down nearly 20% between these two five-year periods.

Examination of the cohort survival ratios indicates that there is little significant net in-migration of school age children.

The number of new housing starts, as well as the type of new housing, suggests that there will be little increase in the school age population because of new housing. Further, there does not seem to be any interest in apartments or multiple family units of a character which would attract families with young children.

Harwich

Since 1950, Harwich has undergone a large increase in its population and nearly all of this dramatic growth is due to in-migration to the town. For example, between 1960 and 1970, Harwich grew by 2145 residents, but the difference between births and deaths during the decade was only 4!

Harwich has a growing population of senior citizens. This is evidenced by the fact that in 1970 nearly 26% of the population was age 65 or older, and 50% of the entire population was 45 years old or over. In a recent study of Harwich entitled "The Rising Tide", Norman Mason placed the retired population in 1976 at over 25% of the entire town population.

The trend in live births over the past fifteen years in Harwich has been an exception to state and national trends. In the five year period from 1961-1966 there was an average of 70 births annually. For the five year period from 1972 to 1977 the average was 66 births. This is a very small decline for a Massachusetts town.

Examination of the enrollments of the Harwich public schools over the past 11 years shows a significant growth that is not accounted for by the number of annual live births. This in-migration of school age children seems to have continued at all grade levels, generally until 1974. This growth is illustrated by the Kindergarten enrollment of 129 in 1977, resulting from 59 births five years earlier, in 1972. There is a continuing pattern of in-migration of school-age children that, while it has decreased, it has not stopped.

There is a trend in the number of new housing starts in Harwich which offers some explanation of the in-migration of school age children in the recent past. A zoning change in 1972 may have been the reason for the drop in the number of new housing permits from 215 in 1973 to 93 in 1974. Such a dramatic drop could account for some of the decline in new arrivals of school age children. It was suggested that there was some out-migration, but an examination of the survival ratios did not show any significant out-migration.

This reduction in the number of new housing permits may also be the forerunner of a reduction in the employment opportunities within the construction industry itself. The sense of the town officials was that while there would be some continued growth in service occupations, there would not be any significant industrial or other development to encourage a significant influx of new residents with school age children.

TABLE 1

NEW HOUSING PERMITS

<u>HARWICH</u>		<u>CHATHAM</u>	
<u>Year</u>	<u>No. Permits</u>	<u>Year</u>	<u>No. Permits</u>
1965	165	1965	
1966	119	1966	
1967	108	1967	
1968	139	1968	114
1969	147	1969	106
1970	189	1970	119
1971	301	1971	144 + 40 Unit
1972	349	1972	Multiple Housing 126
1973	215	1973	90
1974	93	1974	65
1975	97	1975	68
1976	90	1976	99
1977	125	1977	127
1978	57 thru June	1978	39 thru July

Analysis

Future Growth

Chatham - While there are certain indicators which show that the growth in Chatham will continue, this growth is unlikely to impact the school age population in any significant way. In view of the entire pattern of the continuing development of retirement homes, along with rising interest rates, land and construction costs, it is evident that the enrollment base for the Chatham public schools will rest on the number of live births within the town. It is on that assumption of the low percentage of in-migration of school age children that the 3-year cohort survival ratios were used as a basis of the enrollment forecast.

Harwich - Harwich will continue to grow over the next few years in its retirement population, but it is difficult to forecast a continuing in-migration of significant numbers of school age children. The survival ratios of the three most recent years reflect the conditions within the town which are most likely to continue in the future, and it is on the basis of that judgment that the 3-year survival ratios were employed in the projection.

TABLE 2

CHATHAM ENROLLMENT PROJECTION

3-year Cohort Survival Ratio

Year	K	1	2	3	4	5	6	7	8	9	10	11	12	K-5	6-8	9-12	Total
1977-1978	27	61	80	46	56	64	71	71	76	62	68	54	65	334	218	249	801
1978-1979	41	30	58	89	44	56	67	74	70	58	48	60	52	318	211	218	747
1979-1980	48	45	28	64	85	44	59	70	73	54	45	42	58	314	202	199	715
1980-1981	40	53	43	31	61	85	46	61	69	56	42	40	40	313	176	178	667
1981-1982	38	42	50	48	30	61	89	48	60	53	43	37	38	269	197	171	637
1982-1983	50	42	40	55	46	30	64	92	48	46	41	38	36	263	204	161	628
1983-1984		55	40	44	53	46	31	66	91	37	35	36	36		188	144	
1984-1985			52	44	42	53	48	32	65	70	28	30	35		144	163	
1985-1986				58	42	42	56	58	32	50	64	25	29		146	168	
1986-1987					56	42	44	58	57	25	38	56	24		159	143	
1987-1988						56	44	46	57	44	23	33	54		147	154	

TABLE 3

HARWICH ENROLLMENT PROJECTION

3-year Cohort Survival Ratio

Year	K	1	2	3	4	5	6	7	8	9	10	11	12	K-5	6-8	9-12	Total
1977-1978	129	128	117	125	110	114	141	118	147	126	112	93	107	723	406	438	1,567
1978-1979	122	128	119	119	125	114	119	140	124	113	112	99	95	727	383	419	1,529
1979-1980	137	121	119	121	119	130	119	118	147	95	101	99	101	747	384	396	1,527
1980-1981	107	136	113	121	121	124	135	118	124	113	85	89	101	722	377	388	1,487
1981-1982	126	106	126	115	121	126	129	134	124	95	101	75	91	720	387	362	1,469
1982-1983	124	125	99	129	115	126	129	128	141	95	85	89	76	718	398	345	1,461
1983-1984		123	116	101	129	120	125	128	134	109	85	75	91		387	360	
1984-1985			114	118	101	134	139	124	134	103	97	75	76		397	351	
1985-1986				116	118	105	139	138	130	103	92	85	76		407	356	
1986-1987					116	123	109	138	145	100	92	81	87		392	360	
1987-1988						121	128	108	145	112	82	71	73		381	338	

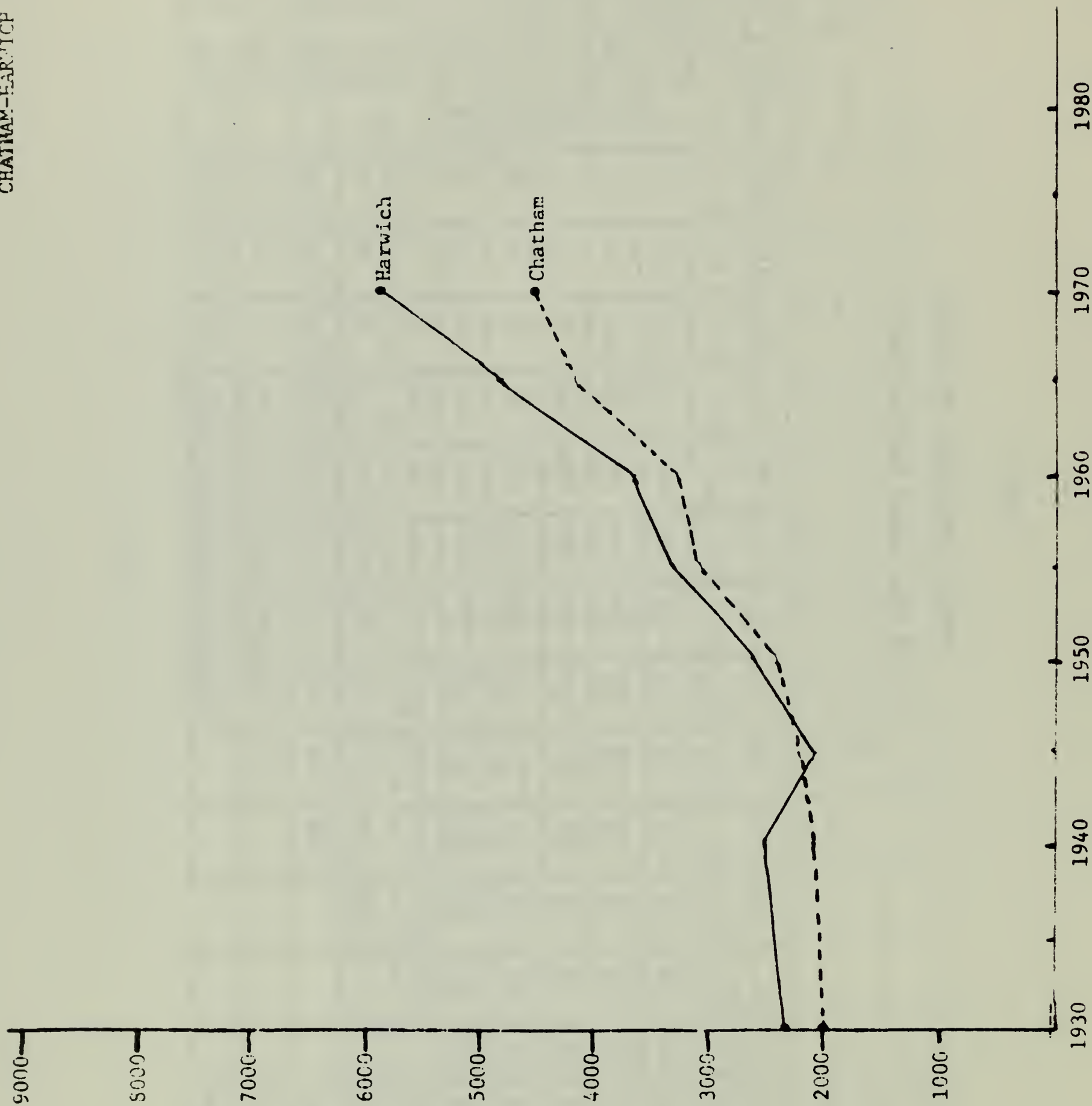


FIGURE 1

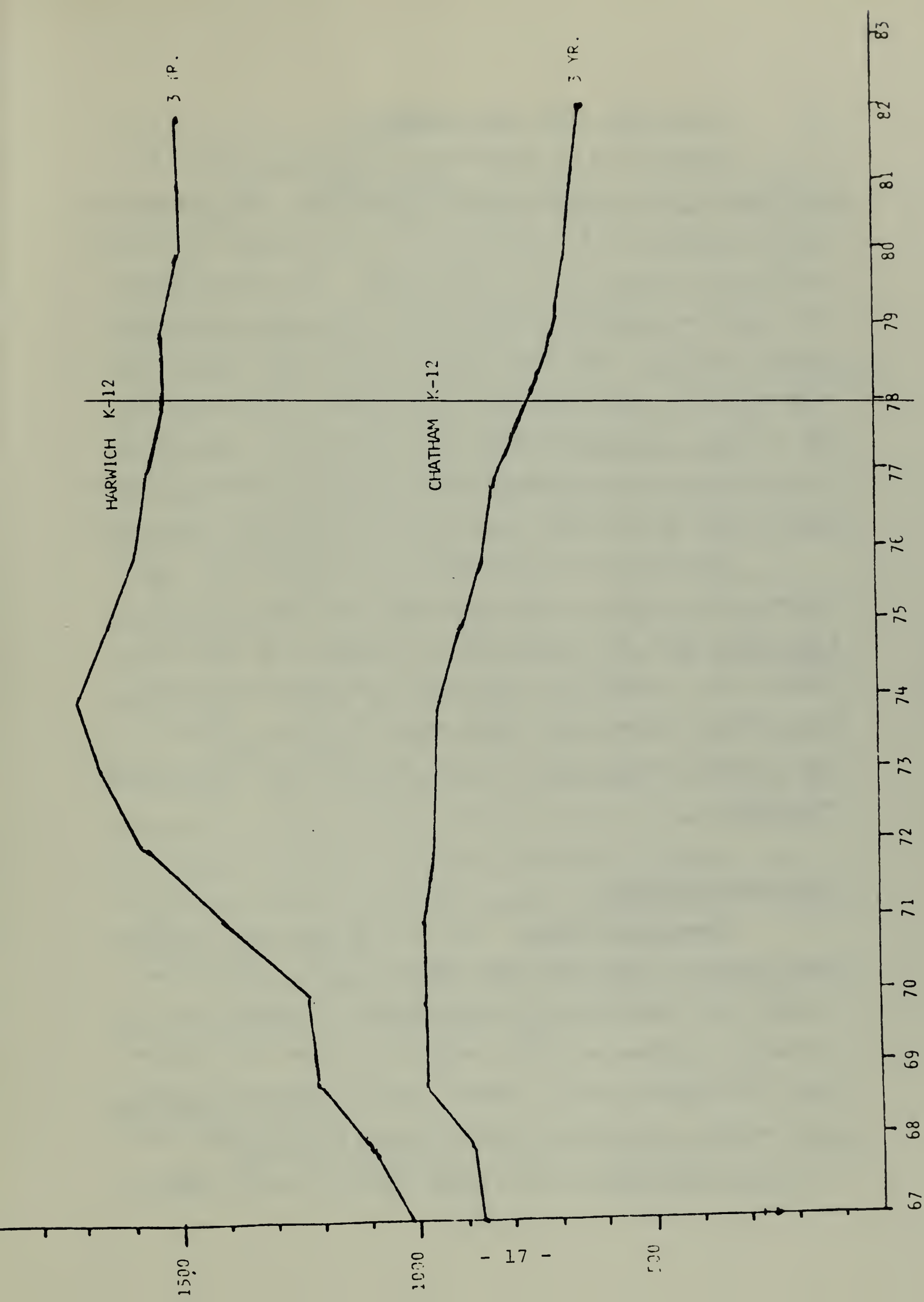


FIGURE 2

IV. FACILITIES STUDY TEAM SUMMARY

Harwich had an enrollment as of October 1977 of 1,567 pupils K-12, housed in three buildings. The elementary school enrollment K-4 is 605 pupils. The intermediate school enrollment, grades 5 & 6, is 224 pupils. The junior/senior high school enrollment is 749 pupils; 271 in the junior high section and 478 in the 9-12 section of the high school. In 1955 and 1974, the elementary school received two additions and in 1964, a new high school was constructed. Two efforts to close the existing intermediate school and create a modern facility for middle school pupils were defeated by the voters.

Chatham had an enrollment of 800 pupils K-12, as of October 1977 housed in three separate buildings. In the elementary unit, K-3, there were 217 pupils. In the intermediate unit, grades 4-8, there were 340 pupils and in the high school, grades 9-12, there were 250 pupils. There is no really recent active history of an effort to up-grade Chatham facilities.

THE CHATHAM SCHOOLS

Elementary School: This school was built in 1956. Three portable classrooms were added in 1969. Facilities include nine classrooms, a kindergarten, a resource room, a cafeteria, a gymnasium with a stage, a kitchen, and support areas for administration, health, special education, speech and reading. A portion of the cafeteria has been set aside to serve as a library. This is an excellent, sound and

attractive school building.

Intermediate School: This school was built to serve as the high school in 1924. A major addition was constructed in 1951. The actual site is 2½ acres, but an adjacent park provides unusually good outdoor opportunities. Facilities include 14 classrooms, two science laboratories, a shop, a reading lab, home economics, art, 2 music, gymnasium, cafeteria, AV room, library, a resource room, and support spaces for administration, special education, guidance and health. The old wing of this school is of wood structural system, and is connected awkwardly to the new wing, which is of steel construction. The classrooms and cafeteria in the old wing are very inadequate; all other facilities are satisfactory. A plan to put this school into conformity with the handicapped regulations is under serious consideration.

High School: This school was built in 1963 on a 35 acre site. Facilities include 12 classrooms, 2 science laboratories, 1 shop, typing, office practice, home economics, art, music, gymnasium, drafting, cafeteria, library, auditorium, and support areas for health, administration, guidance, language, and reading.

By both educational and architectural standards, this must be considered an excellent school.

THE HARWICH SCHOOLS

Elementary School: This school was built in 1949 and expanded in 1955. Three portable classrooms were added in

1974; these now serve for the superintendent's office and for the Cape Cod Collaborative. Facilities include 22 classrooms, kindergarten, an all-purpose room, art, music, material storage, library, gymnasium, cafeteria, special education, health, and administration.

This is an excellent, functional, and complete elementary school.

Intermediate School: This school was built in 1937 to serve as Harwich High School. Facilities include 11 classrooms, art, music, library, and an all-purpose room.

This is a very inadequate school building. All classrooms are undersized. Support services must utilize poor spaces. Educationally and physically, this building must be considered below standard.

High School: The high school was built in 1964, on a 40 acre site. Four portable rooms were added in 1972. While the high school is now separated administratively from the junior high school, all students, 7-12, share common facilities. These facilities include: 25 classrooms, 4 science labs, 2 shops, typing, bookkeeping, 2 home economics, art, music, gymnasium, cafeteria, data processing, auditorium, library, guidance, special education, and administration.

Planned in campus style this has an attractive but somewhat inefficient layout of facilities. Long, blank corridors connect the various units. The library, gymnasium, shops, and home economics are inadequate.

ANALYSIS

As a result of this evaluation process within these two communities, we propose observation under three headings:

1. Sufficiency and adequacy of accomodations within each community for the housing of pupils and programs for each said school system.
2. Possible utilization of the two communities' total school facilities in the event that proper authorities envision a discussion of joint utilization.
3. Alternative proposal.

Under (1) we make the following observations:

Chatham:

That the elementary unit of a relatively recent construction date offers an excellent program in quite commendable spaces with little, if any, need to improve said facilities.

That the intermediate school, while constructed at various points in time and somewhat of a maze as to relationship of spaces due to several levels...still houses a fine program with excellent use of the existing spaces. While not a modern intermediate school by any means, it will obviously serve a very useful purpose for the foreseeable future without any substancial changes. This is not to say that all spaces in what was originally Chatham High School are proper in size or adequacy by modern standards, but it does recognize the fact that effective education is taking

place in less than an ideal school building.

The high school was constructed recently on a fine site and is architecturally impressive. Its facilities are good.

Do the Chatham school facilities adequately house the enrollment and properly aid the implementation of the program? Definitely yes. In the light of declining enrollment (projected 1982 enrollments K-3, 197; 4-8, 280; 9-12, 161) will Chatham be able to close one of its schools? No the grades and numbers cannot be combined in two schools.

Harwich

The elementary school in Harwich, recently added to and renovated--with three portable spaces now housing administration and a collaborative--is an excellent unit with a highly commendable program and a variety of spaces available to implement this program to a maximum degree.

The intermediate school was the old Harwich high school. Although the staff and children make more than maximum use of the facility, its age, space limitations and inherent functional inadequacies automatically limit and inhibit the full flowering of the type of environment to which the children of Harwich are accustomed in their other schools.

It is the only unit in Harwich or Chatham in which one would categorically state that the facilities handicap the staff, the program and the children.

The high school is a relatively new and acceptable unit. It has some unmistakable weak points--in its short-term portable units, in the areas of core facilities and special rooms, such as industrial arts. Basic to the inadequacies is the fact that the unit also attempts to educate grades 7 and 8 pupils, thus placing undue pressure on limited core facilities. Relatively small but key additions and renovations would create a high school about which there could be nothing wanting.

The most critical need of facilities exists at the intermediate level. The relative stability of enrollments in Harwich indicates that there will be a need for this school for the foreseeable future. Renovations are needed for Harwich High School to provide adequate facilities for a secondary school program.

2. If the two communities share facilities, we note:

Elementary - The existing elementary units in Chatham and Harwich could well accommodate their own elementary children in grades K-4.

The intermediate unit in Chatham, while not an architectural jewel, can be used to accommodate children in grades 5 and 6 from both communities.

The intermediate unit in Harwich, having served a lengthy and noble educational purpose might be honorably retired from service and remodeled to suit other community needs.

Junior high grades, 7 and 8, in both Chatham and Harwich, could very logically be accommodated in the present Chatham High School.

The present high school in Harwich, with modifications, would be an excellent unit to serve grades 9-12 from both communities. These modifications would address the inadequacies in core facilities and specialized rooms.

3. Alternative proposal for sharing facilities:

Elementary: Each community retains its own school for grades K-4.

Middle School: Employ the present Harwich High School as the middle school for grades 5-8, for both communities. Use the Chatham and Harwich intermediate schools for other town purposes. (Cancel plans to bring the Chatham Intermediate into conformity with the handicapped code.)

Use Chatham High School as the high school for grades 9-12 for the two communities. Construct an addition to accommodate a library, 6 classrooms and one shop. Use present library as an addition to the cafeteria.

**

The purpose of the review was not intended in any way to provide any definite answer to the facility problems of either or both communities. The observations above are, we hope, just that and only that, from an objective viewpoint. That Harwich

can house its own pupils for the foreseeable future we would acknowledge. That Chatham can do the same we also would acknowledge, but if there is a question being raised at the local level, it is suggested that all alternative solutions be pursued, so that the local parent and taxpayer is convinced that local authorities are producing a cost-effective and quality program for the children of the respective communities.

V. HIGH SCHOOL STUDY TEAM SUMMARY

FINDINGS

The high school study team gathered a list of the courses taught in each high school for the school year 1978-1979. Where possible, equivalent courses were listed side by side. It was assumed that Algebra, for example, is essentially the same course in both Chatham and Harwich. The course enrollments were then combined and in most instances divided by 25 as a class size. While the 25 is an arbitrary figure, it is a reasonable one upon which to determine capacities. In certain other areas, such as art, and industrial arts, a class size of 20 was used as a measure of capacity. This is also an arbitrary number for determining space available, but it is, in the team's view, a defensible one.

The following is a course section enrollment tabulation for the school year 1978-1979.

TABLE 4

<u>COURSE ENROLLMENTS</u>					
Course	<u>Chatham</u>		<u>Harwich</u>		<u>Combined</u>
	No. Sec- tions	No. Stu- dents	No. Sec- tions	No. Stu- dents	No. Sections 25 P/Sec- tion
Algebra I	2	42	4	100	6
Algebra II	2	37	4	59	4
Geometry	3	48	4	80	6
Advanced Math			1	15	1

TABLE 4 (cont'd)

	<u>Chatham</u>		<u>Harwich</u>		<u>Combined</u>
	No. Sec- tions	No. Stu- dents	No. Sec- tions	No. Stu- dents	No. Sections 25 P/Sec- tion
College Math	1	11	1	12	1
Basic Math/ Potpourri	1	13	2	34	2
Business Math	1	17	1	16	2
Pre Albegra	2	26	1	13	2
French I	2	21	4	94	5
French II	2	18	5	86	6
French III	2	18	3	46	3
French IV	1	3	1	16	1
Latin I	1	15	1	24	2
Latin II	1	6	1	14	
Spanish I	2	32	3	69	4
Spanish II	1	16			
Spanish III	1	10			
Spanish IV	1	2			
English 9	3	65	6	128	8
English 10	3	65	5	113	7
English 11	3	65	5	113	
English 12	3	65	5	97	
English Lit- erature			2	29	
Business English			1	16	

TABLE 4 (cont'd)

Course	<u>Chatham</u>		<u>Harwich</u>		<u>Combined</u>
	No. Sec- tions	No. Stu- dents	No. Sec- tions	No. Stu- dents	No. Sections 25 P/Sec- tion
Industrial English			1	12	
Drama			1	15	
Modern Fiction			1	24	
Fiction			1	10	
Current Issues			1	9	
Shakespeare			1	23	
Expository Writing			2	46	
Media			2	32	
Creative Writing			1	11	
Ancient History	1	16	4	105	5
Comparative Politics, Economics & Gov't.	1	18			
U.S. History	1	16	5	97	5
Current Issues	1	23			
Psychology	1	15			
Anthropology	1	30	1	22	2
U.S. Government			4	107	
European History			4	96	
Comp. Cultures			1	17	
S.E. Asian History			1	8	
History A	1	27			
History B	1	26			

TABLE 4 (cont'd)

Course	<u>Chatham</u>		<u>Harwich</u>		<u>Combined</u>
	No. Sec- tion	No. Stu- dents	No. Sec- tions	No. Stu- dents	No. Sections 25 P/Sec- tion
Typing I	2	51	5	107	7
Typing II	1	16	1	19	2
Pers. Typing	1	19			
Acct. I	1	12	2	25	2
Acct. II	1	2	1	14	1
Shorthand I)) Shorthand II)	1	9	1	15	
Office Practice	1	3	1	8	1
Bkkpg/Gen.Business	1	8	1	10	1
Economics			1	10	
Stenoscript			1	12	
Consumer Business			1	18	
Business Law			1	12	
					@ 20 P/Section
Architect Dwg.			1	11	
Tech. Drawing			1	10	
Mech/Arch.Dwg.	1	12			
Small Engines	1	11	1	14	2
Wood.A	1	16			
Wood.B	1	15			
Wood.C	1	5			
Metal			1	11	

TABLE 4 (cont'd)

Course	<u>Chatham</u>		<u>Harwich</u>		<u>Combined</u>
	No. Sec- tion	No. Stu- dents	No. Sec- tion	No. Stu- dents	No.Sections 25 P/Sec- tions
Explo. IA-9			1	12	
Wood Techn.			1	12	
House Constr.	1	6			
Shop Math			1	8	
Gen'l Home Econ.	3	10			
Intro. Home Econ.	1	6	2	16	
Advance Sewing			1	7	
Tailoring			1	5	
Needlecraft			1	6	
Chef's Cooking	1	14	1	12	
Food Services			1	8	
Advanced Foods			1	5	
Sr. Home Econ.	1	12			
<hr/>					
Art I/Drawing Painting	1	20	1	17	2
Art II	1	9			
Sculpture			1	7	
Design			1	9	
Art III	1	8			
Pottery			1	10	
Jewelry			1	14	
Photography			2	25	

ANALYSIS

From a review of the course offering and the enrollments in both Chatham and Harwich High Schools it is evident there is an under-utilization of instructional staff. This under-utilization is not the product of any mismanagement or administrative inefficiency, but it is due largely to the small enrollment base.

The strong commitment to education in both towns is evident from the fact that there are a large number of course offerings that are maintained with very small class sizes. To illustrate the point, Chatham offers French IV to three pupils and Harwich offers the same course to sixteen pupils, Chatham offers physics to five students and Harwich offers the same course to ten students.

There were also areas of strengths and weakness in the variety of course offerings. For example, Harwich offered four years of French and two years of Spanish. Chatham offered four years of Spanish, two years of Latin and four years of French.

Numerous other instances of offerings in one area were available to students in one town, but not to students in the other town. Examination of the different course offerings in Industrial Arts, Art, and English clearly suggests that by combining the course offerings a much better utilization of staff could be effected. This improved utilization of the staff would allow for the expansion of the program to increase the number of course offerings.

In the areas of foreign languages, mathematics, science and business education there was a significant overlap where both towns offered the same course but to a small number of students.

As with most high schools there are many aspects of the academic program that are quite similar. Both schools offer four years of English, four years of Math and the like. The team studied the two high school programs in common and found a under-utilization which suggests a need for involvement in some common courses. This would result in a significantly better utilization of the Professional staff.

At a minimum the team recommends the implementation of a cooperative program between the two schools regarding course offerings. Cooperation would be to the benefit of both schools, and the benefits would continue to increase as enrollments slide downward and the cost-effective aspects of such cooperation becomes increasingly evident.

The team believes that various methods of cooperation are possible through the use of scheduling techniques. For example, a block of time might be set aside during the school day where a common elective block could be established at either or both high schools.

Operating one high school for both towns would be another method of addressing the under-utilization of both schools.

A comparative study on the number of high school course offerings was made on the towns of Barnstable, Chatham, Falmouth and Harwich showing the following results:

Barnstable	175
Chatham	95
Falmouth	199
Harwich	109

These are the total number of course offerings which are available to students as described in the Program of Studies for each town. No attempt was made to distinguish between courses of different time lengths. It should be noted that the combined course offerings of Chatham and Harwich are just a little more than half of those in Falmouth.

Table 5 below offers a sample comparison of course offerings in four Cape towns. The data source in each instance was the high school catalogue and a word of caution is appropriate with regard to unwarranted inferences being drawn from the comparison. It must not be viewed as a measure of quality, but it is intended primarily to suggest that there is a relationship between the size of a high school and the variety of offerings.

TABLE 5

COURSE OFFERING COUNTS

	<u>Barnstable</u>	<u>Falmouth</u>	<u>Chatham</u>	<u>Harwich</u>
English	46	13	25	20
Social Studies	16	26	11	10
Humanities		2		
Mathematics	15	20	9	10
Science	17	18	6	11
Foreign Language	21	16	12	6
Business Education	19	23	11	17
Distributive Education	1	7		
Art	10	11	3	9
Industrial Art	2	16	6	10
Driver Education	1	1	1	1
Home Economics	9	15	6	11
Health Careers	2			
Music	16	9	4	3
Personal and Career Development		4		
Reading		5		
Health		10		
Work Study	<u>1</u>	<u>3</u>	<u>1</u>	<u>1</u>
	175	199	95	109

VI INTERMEDIATE SCHOOL STUDY TEAM SUMMARY

CHATHAM INTERMEDIATE SCHOOL

Presently houses grades 4 to 8 in a single facility with a total enrollment of 340.

<u>Grade</u>	<u>No. Sections</u>	<u>Enrollment</u>
4	2	56
5	3	64
6	3	71
7	3	71
8	4	76

INSTRUCTIONAL PATTERNS

Grades 4, 5 and 6 are in a unified language arts program (Holt-Rinehart, Winston) and students are homogeneously grouped in both language, arts and math. Students are heterogeneously grouped for all other subjects. Grades 7 and 8 are departmentalized and pupils are grouped homogeneously in math and English, and heterogeneously grouped in the other subjects. French is offered to two groups in 7th and 8th grades. All students in grades 6, 7 and 8 have opportunities to participate in industrial arts and home economics.

CURRICULUM COORDINATION

There is no full-time curriculum coordinator in town. The Principals coordinate the curriculum in each building. There are curriculum guides. There are also four K-12 subject area coordinators.

STAFFING

1 full-time principal
4 special needs teachers; 3 - 80%, 1 - 100%
1 full-time librarian/media person
1 full-time art teacher
1 full-time and 1 part-time - 40% - P.E. teacher
1 part-time - 40% - vocal music teacher and 1 full-time instrumental music teacher
1 part-time reading specialist - 35%
1 full-time shop teacher (wood)
1 full-time home economic teacher (grades 6, 7 and 8)
3 tutors (ld-ed)

ACTIVITIES

There is a band (75 members) grades 6, 7 and 8 and some 5th

A Junior band - 4th and 5th grades

A 30 member mixed chorus

Choir

There is an intra-mural sports program: tennis, soccer, basketball, softball - coed at grades 4 and 5.

There is inter-scholastic sports: field hockey for girls, soccer for boys, girls' basketball and softball and boys' basketball and softball

A 30 member student council

Ski Club, Jr. National Honor Society, regularly scheduled Jr. High Dance (grades 7 & 8) limited to members of the class and guests

HARWICH MIDDLE SCHOOL

The Harwich middle school consists of grades 5 through 8. Grades 5 and 6 are housed in an older building on Sisson Road, Harwich. Grades 7 and 8 are housed at the Harwich Jr.-Sr. High School. There is a full-time principal and assistant principal.

The total enrollment of grades 5 through 8 is 520.

<u>Grade</u>	<u>No. Sections</u>	<u>Enrollment</u>
5	5	114
6	6	141
7	6	118
8	7	147

INSTRUCTIONAL PATTERNS

Grades 5 and 6 have a team teaching organization. There are two-member teaching teams with 40-45 students, plus a half-time co-teacher who handles basic skills. Students are grouped heterogeneously. Grades 7 and 8 are semi-departmentalized. There are four 3-teacher teams that split core subjects--Science/Math, Social Studies, Language Arts/Reading. Shop and Home Economics are offered to all at grades 7 and 8 levels. Eighth grade students have 1/2 year French and 1/2 year Spanish. There is also a career education component taught by regular teachers. Children with special needs are mainstreamed for the most part with resource teacher at grades 5-6. There are 4 full-time resource/special needs teachers at the grade 7-8 level.

CURRICULUM COORDINATION

Each building has teachers called task-coordinators whose job is to organize curriculum and programs and assist teachers in the individualization of instruction. There are written curriculum guides for K-12 with sequentially developed programs. It is the responsibility of coordinators in each building to keep track of and assist

teachers in the continuous development and evaluation of goals and objectives. The intermediate school does not use basal texts per se, but uses a wide variety of books and materials to meet their objectives.

STAFFING

There is a librarian/media person at grades 7-8 who also serves the high school, and a volunteer librarian at the intermediate school. The intermediate school has a full-time art teacher, 2 full-time music teachers (1 vocal and 1 instrumental). There is a 1/4-time P.E. teacher and a 1/2-time drama teacher. (Their time is split with grades 7-8.

ACTIVITIES

There is an intermediate school band and orchestra and a junior high band and orchestra. Choral groups at both levels. There are drama clubs and a rocketry club. There is a student council in each building. At grades 7-8 there are intra-mural and inter-scholastic sports programs in field hockey, soccer, basketball and softball. At grades 5-6 there also are intra-mural sports.

RECOMMENDATIONS

It is unfortunate that the fine middle school program in Harwich suffers from the severe handicap of two separate buildings. It would be most desirable to provide one facility for the Harwich middle school program.

A review of the middle school programs suggest that some sharing of resources could be of significant educational benefit to each town. Such sharing need not involve the transportation of students, but, perhaps, it could involve the sharing of staff. In certain subject areas, scheduling in the two middle schools could provide for the opportunity to the exchange staff. Offerings to students could be expanded without transportation.

VII ELEMENTARY SCHOOL STUDY TEAM SUMMARY
FINDINGS

Harwich Elementary School

The Harwich Elementary School houses Grades K through 4. Present enrollment is 606 pupils. Breakdown by grade and class is as follows:

Kindergarten - 2 morning, 2 afternoon sessions.

Enrollment 94 - 23/24 per class

Grade 1 - 6 classrooms 117 total; 19/20 pupils
per class

2 - 6 classrooms 129 total - 21/22 pupils
per class

3 - 5 classrooms 125 total - 23/26 pupils
per class

4 - 5 classrooms 110 total - 25/26 pupils
per class

Classroom Organization

The Harwich Elementary School has an Early Childhood Development Center consisting of three levels. Level I has fifteen children ages 3 & 4. Level II has 120 kindergarten children, broken into four sessions, two in the morning and two in the afternoon. Level III is a transition class for eighteen children not ready for first grade.

The Early Childhood Development Center is a multi- age facility and is organized around the team teaching concept.

There is an Early Childhood coordinator responsible for all screen and assessment. There are also Early Childhood Specialists for Speech and Language and Motor development.

There is an Early Childhood curriculum stressing readiness in terms of language, motor, social, emotional and cognitive development.

The basic pattern, Grades 1-6, is self-contained classrooms. There is some limited team teaching.

Faculty/Staff

There is a full-time supervising principal and 1 administrative assistant. There are 27 regular classroom teachers, 2 special needs teachers, 2 guidance counselors, 1 school/home teacher, 1 crisis intervention teacher. There is a full-time art teacher, 2 P.E. teachers who also teach health, 1 library/media coordinator for K-12 and librarian aid at the school. Also a full-time vocal music teacher and an instrumental teacher one day a week. In addition, there are 2 speech therapists, one who spends most of the time at the elementary school system and 3 tutors in the Title I program. As part of the Title IVc project, there are 3 co-teachers who work part time (3 hours each morning) in reading and language arts skills development.

Curriculum:

There is vertical articulation of the curriculum through grade 6. Again, as in the intermediate school, there are 2 teachers designated as task-coordinators, who function in a similar fashion. Basal tests are not used. There is an abundance of books, materials and supplies available for the development of skills and content.

Activities

The school has regularly scheduled assembly programs and field trips. Arts and Science fairs are held two or three times a year. There is an after school sports program in soccer, basketball and softball, open to all. There is a Little Fiddlers String Program and a 4th grade band and orchestra.

Chatham Elementary School

The Chatham Elementary School is a single-story building, housing grades K to 3. The total enrollment of the school is 217. Enrollment by grades is as follows:

Kindergarten - 1 morning and 1 afternoon session -

14 pupils and 15 pupils respectively.

Grade 1 - 3 classrooms - 19, 21, 21 pupils - Total 61

2 - 3 classrooms - 29, 23, 27 pupils - Total 79

3 - 2 classrooms - 24 and 24 pupils - Total 48

The Chatham Elementary School has one kindergarten classroom conducting a morning session and an afternoon session. There are approximately fourteen to fifteen children in each session. Two 3 and 4 year olds are serviced for speech.

There is 1 professional who has early childhood training for grades K-3, and there is a team coordinated by the Special Education Director to conduct Chapter 766 screening.

The readiness curriculum is flexible and includes reading and language readiness as well as some supplemental use of basal readers.

Basically, the school has self-contained classroom organization. Pupils are homogeneously grouped for reading and math during most of the morning and are heterogeneously grouped for the remainder of the day in the first grade. The second and third grades are heterogeneously grouped except for the reading program. Those more academically talented are in the Open Court Reading Program - others in the Winston series. Except for the reading, pupils are heterogeneously grouped in a self-contained classroom.

There is a full-time supervising principal and 9 regular classroom teachers. There is a school adjustment counselor available four days a week and a guidance counselor one day a week. An art teacher is in the building 1½ days a week, vocal music teacher one day a week, and P.E. teachers for two days per week. There is no instrumental music program. A small, but well-stocked library is combined with the cafeteria

and is staffed by a teacher aide. A speech therapist is at the school four days a week. A reading teacher is available and devotes 65% of her time in 1 to 1/or small group instruction in reading. The school adjustment counselor and the reading teacher work with special needs children. The school has 1 full-time secretary and 2 full-time custodians and 2 cafeteria workers.

Curriculum

There are written curriculum guides - some are old. They do have new reading and math curriculum guides. There are 4 sub area coordinators. Groups of teachers have and are presently working in curriculum development. There is vertical articulation of the curriculum to a limited extent from kindergarten to grade 8. Basal texts are used in all subject areas. There is an ample supply of supplementary materials available which are well-developed, catalogued and used.

Since this school has the primary grades, the activities are somewhat limited. There are regular assembly programs and they have school fairs in art, science, etc. Field trips are held on a regular basis. They do not range too far afield, but do take children to various places. There is no formal or even really informal intra-mural sports program.

It is the recommendation of this committee that, if Chatham and Harwich decide to share educational experiences, the Little String program be shared with the children of Chatham Elementary Schools.

VIII FOOD SERVICES STUDY TEAM SUMMARY

FINDINGS

The system-wide average for student participation in the School Lunch Program in Chatham is 66% while participation in the Special Milk Program is 26%. The system-wide average for student participation in the School Lunch Program in Harwich is 71%, with the Special Milk Program holding at 55% and the School Breakfast Program at 17%. These participation averages all fall within the state-wide norm, with the exception of the 26% for the Special Milk Program in Chatham, which is slightly below the state-wide norm.

The kitchen facilities in each school in both towns were in compliance with established sanitary standards and generally adequate to meet serving demands. The exception was the kitchen at the Intermediate School in Harwich. This particular facility is old and outdated for the increased enrollments of today. With financial assistance made available through the Bureau of Nutrition, however, efforts are being made to up-grade the facility with the addition of more modern equipment. As previously mentioned, storage facilities in both towns are inadequate; more space with better ventilation is needed. A high level of productivity is achieved in five of the six kitchen facilities. The lower productivity in Chatham High School may be a result

of the non-selective menu and limited baking program at this school.

In both Chatham and Harwich, every effort is made to plan menus which will meet the nutritional needs of the students being served. Harwich makes a choice menu available at all grade levels. Chatham usually offers a choice of entrees at the elementary and intermediate levels. Good use of government donated foods is made in both systems. The commodities are used extensively in both Chatham and Harwich's excellent baking programs. All cafeterias in both towns were visited and in each instance the lunches were well-prepared, and attractively served.

ANALYSIS

The Food-Service departments in both Chatham and Harwich are making purchasing cost effective by obtaining price quotes from several vendors for items of like quality to insure receiving the best price for desired quality. A system of cooperative purchasing might result in benefits in the form of lower food costs to both towns. Purchasing power in both towns will remain limited as long as the severe lack of storage space in both systems exists.

IX OPINION SURVEY

On July 18, 1978, three staff members from the Department of Education, Marie Fricker, Christine Lynch, and Peter Murphy, conducted eleven interviews in the town of Chatham to assess opinions of local town officials relative to a proposal for Unification/Regionalization between the Chatham and Harwich School Districts. Fourteen similar interviews were conducted in the Town of Harwich on July 21st by the same three individuals using identical Interview Guides. A complete copy of the Interview Guide Summary Sheets is attached.

FINDINGS AND ANALYSIS

A summary of the information and data collected during the twenty-five interviews reveals that a majority of the respondents would support in concept a sharing of educational resources including programs, school buildings and facilities, teachers and professional personnel, the Superintendent of Schools and administrative offices as well as an exchange of secondary school students. Joint activities involving planning, school transportation and school lunch programs also received an endorsement from the majority of those interviewed.

It is important here to emphasize that support was expressed for the "concepts" of joint activities and

shared programs since no detailed, specific plan, with attendant fiscal and program implications, was presented to the respondents for their consideration and reaction.

Forty-four percent of the sample interviewed would not support a Chatham-Harwich K-12, unified regional school district; thirty-six percent responded in the affirmative while twenty percent expressed a neutral position. Factors most often cited in terms of influencing opinion on the establishment of a regional school district were as follows:

- | | |
|--|-----|
| 1. the uncertainty of continued state financial support to regional school districts | 76% |
| 2. a regional school district could offer a more comprehensive educational program | 76% |
| 3. loss of local control | 68% |
| 4. loss of community pride and identity | 64% |

RECOMMENDATIONS

1. Local school officials should survey a much broader sample of the Chatham and Harwich communities and include among their sample population (a) secondary public school students (b) their parents, as well as (c) teachers and professional staff members. The support of these three groups appears to be crucial.

2. A specific proposal for unification/regionalization

should not involve significant school construction. There appears to be unanimous opposition to major school construction in both towns.

3. In order to gain acceptance in both towns, a specific plan for unification/regionalization must address the declining school enrollment problem in Chatham and the overcrowded situation at grade levels 7-8 in the town of Harwich.

4. A proposal for unification/regionalization will only be supported if it can be demonstrated that it is cost effective and that it provides much better quality educational programs to the students in both towns.

5. Any plan for establishing a K-12 regional school district between the Chatham and Harwich School Districts must address the following major concerns:

- a. Loss of local control
- b. Protection of teacher rights and benefits
- c. Loss of community pride and identity
- d. School housing for elementary students in towns of residency
- e. State financial incentives available to a K-12 unified Chatham-Harwich Regional School District.

Interview Guide

SUMMARY SHEETS

School officials in the towns of Chatham and Harwich are considering the feasibility of pooling their educational resources and providing educational programs services which meet the common needs of students in both communities.

1. Do you support this kind of joint educational planning?

a. yes b. no c. I don't know

Chatham (N=11)	8	2	1
Harwich (N=14)	6	4	4
Total (N=25)	<u>14</u> (56%)	<u>6</u>	<u>5</u>

2. Would you support a sharing of educational programs in such areas as special education or occupational education?

a. yes b. no c. I don't know

Chatham (N=11)	11	0	0
Harwich (N=14)	13	1	0
Total (N=25)	<u>24</u> (96%)	<u>1</u>	<u>0</u>

3. Would you support a common transportation system?

a. yes b. no c. I don't know

Chatham (N=11)	8	2	1
Harwich (N=14)	8	5	1
Total (N=25)	<u>16</u> (64%)	<u>7</u>	<u>2</u>

4. Would you support a sharing of school buildings and facilities?

	a. yes	b. no	c. I don't know
Chatham (N=11)	6	3	2
Harwich (N=14)	13	1	0
Total (N=25)	<u>19</u>	<u>4</u>	<u>2</u>

(76%)

5. Would you support an exchange of students above the elementary grade levels?

	a. yes	b. no	c. I don't know
Chatham (N=11)	10	1	0
Harwich (N=14)	11	2	1
Total (N=25)	<u>21</u>	<u>3</u>	<u>1</u>

(84%)

6. Would you support a sharing of teachers and other professional personnel?

	a. yes	b. no	c. I don't know
Chatham (N=11)	10	0	1
Harwich (N=14)	12	1	1
Total (N=25)	<u>22</u>	<u>1</u>	<u>2</u>

(88%)

7. Would you support a joint school lunch program?

	a. yes	b. no	c. I don't know
Chatham (N=11)	5	3	3
Harwich (N=14)	10	3	1
Total (N=25)	<u>15</u>	<u>6</u>	<u>4</u>

(60%)

8. Would you support a single Superintendent of Schools and administrative office for the two school systems?

a. yes b. no c. I don't know

Chatham (N=11)	6	3	2
Harwich (N=14)	7	4	3
Total (N=25)	<u>13</u>	<u>7</u>	<u>5</u>

(52%)

9. Would you support the establishment of a unified, K-12 regional school district with one Superintendent of Schools and one School Committee with total jurisdiction over education in both towns?

a. yes b. no c. I don't know

Chatham (N=11)	7	3	1
Harwich (N=14)	2	8	4
Total (N=25)	<u>9</u>	<u>11</u>	<u>5</u>

(36%)

(44%)

10. Do the following factors influence your support (or lack of support) towards the establishment of a regional school district for the Towns of Chatham and Harwich?

a. Loss of local control over educational matters

	yes	no	neutral
Chatham (N=11)	5	6	
Harwich (N=14)	12	2	
Total (N=25)	<u>17</u>	<u>8</u>	

(68%)

b. Fear of consolidation of elementary schools

	yes	no	neutral
Chatham (N=11)	3	8	
Harwich (N=14)	5	9	
Total (N=25)	<u>8</u>	<u>17</u>	

(68%)

c. A regional school district might bus elementary students
out of town

	yes	no	neutral
Chatham (N=11)	5	6	
Harwich (N=14)	8	6	
Total (N=25)	<u>13</u>	<u>12</u>	

(52%)

d. Declining school enrollments

	yes	no	neutral
Chatham (N=11)	6	5	
Harwich (N=14)	4	10	
Total (N=25)	<u>10</u>	<u>15</u>	

(60%)

e. Escalating local school expenditures

	yes	no	neutral
Chatham (N=11)	6	5	
Harwich (N=14)	7	6	1
Total (N=25)	<u>13</u>	<u>11</u>	<u>1</u>

(52%)

f. Loss of community pride and identity

	yes	no	neutral
Chatham (N=11)	6	5	
Harwich (N=14)	10	4	
Total (N=25)	<u>16</u>	<u>9</u>	
	(64%)		

g. Regional school districts increase educational costs

	yes	no	neutral
Chatham (N=11)	6	4	1
Harwich (N=14)	8	2	4
Total (N=25)	<u>14</u>	<u>6</u>	<u>5</u>
	(56%)		

h. Regional school districts lead toward greater state control of education

	yes	no	neutral
Chatham (N=11)	3	7	1
Harwich (N=14)	9	3	2
Total (N=25)	<u>12</u>	<u>10</u>	<u>3</u>
	(48%)		

i. The state provides significant incentive monies to K-12 regional school districts

	yes	no	neutral
Chatham (N=11)	4	6	1
Harwich (N=14)	6	5	3
Total (N=25)	<u>10</u>	<u>11</u>	<u>4</u>
	(44%)		

j. Continued state financial support to regional school districts is uncertain

	yes	no	neutral
Chatham (N=11)	8	2	1
Harwich (N=14)	11	2	1
Total (N=25)	<u>19</u>	<u>4</u>	<u>2</u>

(76%)

k. A regional school could offer a more comprehensive educational program

	yes	no	neutral
Chatham (N=11)	8	3	
Harwich (N=14)	11	3	
Total (N=25)	<u>19</u>	<u>6</u>	

(76%)

l. Difference between the two towns pose a very difficult barrier to the establishment of a regional school district

	yes	no	neutral
Chatham (N=11)	4	6	1
Harwich (N=14)	8	6	
Total (N=25)	<u>12</u>	<u>12</u>	<u>1</u>

(48%) (48%)

X FINANCE STUDY TEAM SUMMARY

In Table below are the per-pupil costs of all the academic school districts on Cape Cod. For those towns in the Nauset Region, the costs have been allocated to each town in the region.

The first column represents the current operating costs as reported for the school year 1976-77, divided by the net average membership. The second column is the cost per-pupil of special needs. The third column is combined cost for all progress.

TABLE 6

OPERATING COSTS PER PUPIL SCHOOL YEAR 1976-77

	<u>Regular Day</u>	<u>Special Ed</u>	<u>All Programs</u>
Brewster	1180	2921	1354
Dennis/Yarmouth	1382	2309	1483
Bourne	1671	2497	1602
Barnstable	1289	2003	1610
Falmouth	1472	2490	1616
Mashpee	1594	2809	1712
Sandwich	1718	2773	1784
Harwich	1651	2535	1805
Orleans	1639	2785	1850
Eastham	1608	3217	1874
Chatham	1881	2144	1936
Wellfleet	1708	3077	2015
Truro	1903	3702	2116
Provincetown	1947	3321	2156

TABLE 7

SCHOOL EXPENDITURE COMPARISON
SCHOOL YEAR 1976-77 *

<u>CHATHAM</u>	<u>CATEGORY OF EXPENDITURE</u>	<u>HARWICH</u>
\$ 53,826	1000 Administration	\$ 98,225
8,188	2100 Supervisory	50,388
100,723	2200 Principal Office	144,871
972,808	2300 Teaching	1,610,381
8,501	2400 Textbooks	16,850
41,555	2500 Library	35,144
20,105	2600 Audio-Visual	24,943
43,032	2700 Guidance	38,640
37,051	2800 Psychological	28,319
	Educational TV	5,340
1,231,963	2000 Instuction Total	1,954,876
630	3100 Attendance	
14,060	3200 Health	2,759
95,427	3300 Transportation	165,469
7,140	3400 Food Service	19,440
	3510 Athletics	16,235
1,451	3520 Other Student Body	17,002
208,800	4110-4130 Operating Plan	253,972
53,623	4210-4230 Maintenance	113,419
	5100 Employee Retirement	26,700
	5200 Insurance	61,861
	5300 Rental-Kease	
	5400 Debt Service Interest	473
	5500 Other Fixed Charges	
900	6000 Community Service	
	7100 Acquist + Improv. Site	
	7200 Acquist + Improv. Bldg.	29,963
16,434	7300 Acquist + Improv. Equip.	1,021
13,205	7400 Replacement of Equip	
	7500 Acquist Motor Vehicle	
	7600 Replace Motor Vehicle	
65,000	8100 Debt Retirement (Princ.)	224,326
11,310	8200 Debt Retirement (Int.)	115,316
33,243	9000 Tuition	8,766
45,659	9400 Collaboratives	8,963
182,449	9500 Regional Assess.	315,898
<u>\$2,035,120</u>	LOCAL FUNDS (Total)	<u>\$3,434,683</u>

* Data source was
the end of the
year report as
submitted to the
Department of Ed-
ucation

TABLE 8

State Department of Education
Bureau of School District Reorganization and Collaboration
Chapter 492, Financial Incentive to Encourage Formation of
Adequate Unified K-12 School Districts

Fiscal _____ data used for computations
Average valuation per school attending child (All Regional
Districts) (50,902)

Proposed K-12 District

<u>Communities</u>	<u>Regional Valuation</u>	<u>Regional School Attending Children</u>	<u>Regional Valuation Per School Attending Child</u>
CHATHAM	298,900,000	938	
HARWICH	<u>318,500,000</u>	<u>1,734</u>	231,063
	617,400,000	2,672	
		<u>Regional Valuation Percent</u>	

Regional Valuation Percent (Divide Regional state average
dollars per SAC into dollars per
SAC in proposed district)

$$231,063 \div 50,902 = 4.54$$

Regional School Aid Percentage Formula

$$1.00 - .65 (4.54) = (195\%)$$

K-12 Regional School Aid Percentage (70% times the School
Aid Percent)

$$70\% \times (195\%) = \text{Minimum School Aid percentage of } 10.5\%$$

Reimbursable Expenditures

CHATHAM	1,543,456
HARWICH	<u>2,450,514</u>
	3,933,970

TABLE 8 (cont'd)

K-12 Regional Incentive Entitlement (K-12 School Aid Percentage times the Reimbursable Expenditures)

3,933,970	x	10.5%	=	<u>\$419,367</u>
Regional K-12 State Construction Grant -				Minimum of 60% to
		.48,769		Maximum of 75%
60%	x	-----	=	Minimum Grant of 60%
		231,063		

ANALYSIS

Examination of the end of the year financial reports of both Chatham and Harwich points out that in certain areas such as special education and transportation some savings may be possible through sharing and cooperation. The full financial benefit of sharing resources is only achieved through the formation of a regional school district. The formation of a regional school district probably will result in lower local costs because of increased state aid.

It has been the experience of most communities that forming a regional school district does not reduce the expenditures for education and instruction appreciably.

FINANCIAL INCENTIVES TO REGIONAL SCHOOL DISTRICTS

Since 1954 the state has provided special fiscal incentives to regional school districts. This aid has its own appropriation and it is separate from all other categories of state aid,

including the most recent change General School Aid.

This regional aid was revised in 1974 and it has been fully funded for the past four years. For a Chatham-Harwich regional school district this aid would probably amount to over \$400,000. annually beyond any other state or federal payments.

Transportation for regional school districts is fully reimbursable. This difference is not large and amounts to \$5. for each pupil over the regular reimbursement.

Additional reimbursement for construction costs are also available to regional school districts. A Chatham-Harwich regional school district would receive a reimbursement of 60% of the cost of construction, including interest charged on borrowing, of a school project. Planning costs are also fully reimbursable.

Planning costs include architectural fees and typically amount to 5% of the cost of a project. The special construction incentives to a regional school district have always been fully paid by the school building assistance account since its inception.

XI. SPECIAL EDUCATION STUDY TEAM SUMMARY

FINDINGS

CHATHAM

Program Prototype Figures

502.1	18
502.2	101
502.3	3
502.4	1
502.5	12
502.6	4

Limited population does not afford cost effective programming. A review of some prototype areas could effectively lower per-pupil cost on a regional basis. Lack of available groupings in certain prototypes have forced out-of-district placements at inflated cost. It has been estimated that 50% of the cost of out-of-district placements could be saved if services were available in conjunction with another community. The amount of savings cannot be determined exactly; however, Chatham, for 1976-1977 expended \$78,902. for out-of-district placements, whereas Harwich expended \$17,519. A review of transportation cost by private carrier finds the sum of \$23,820. being expended for 19 students.

HARWICH

Program Prototype Figures

502.1	101
502.2	136
502.3	2
502.4	10
502.5	6
502.6	1

Increased numbers in certain prototypes would allow programmatic cost to be somewhat more cost effective. Evidence of

past out-of-district placements in the Nauset Clinical Training Center, following review and program planning, allowed 12 students to return to the L.E.A. in less restrictive prototypes and to be included in the mainstream. Needless to say, this kind of thinking could probably effect similar changes in the adjoining community. Similarly, in reviewing transportation, the cost of transporting 39 students amounts to \$24,318.

ANALYSIS

It was concluded by both administrators that with some coordination, the possible purchase of an additional van, having vehicles travelling in opposite directions, a possible savings of 30% of present cost could be effected. The original cost could be depreciated over a few years more than justifying the expense.

XII. RECOMMENDATIONS

This study can not supplant the work of the Regional Planning Board. Nor is it intended to replace the fine work of the parents groups between the two towns. The study should provide, for a variety of groups, a basis for further investigation and discussion.

The team recommends the continuation of the Regional Planning Board's investigation of a regional school district. This investigation must have the active support of the school committees, boards of selectmen, finance committees, school administration, parents, teachers and students. The team believes that it is in the best interests of the towns and of education to form a regional school district, but this is a choice which ultimately resides solely with the members of the respective town meetings.

The team recommends that the two school committees actively encourage cooperation between the two school districts. The areas that have been identified as having the potential for co-operation should be pursued by a joint planning team consisting of administrators, teachers, parents, and students.

For the school administrators and teachers, it is hoped that the team's suggestions for cooperation will be seriously studied and acted upon. Inter-town cooperation will not be possible without the active and strong support of the school administrators and teachers.

